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REMARKS

Claims 1 through 11 and 16 through 20 are pending in the application.

Applicants acknowledge with gratitude the Examiner's indication that Claim 20 will be allowed upon amending into independent form. Accordingly, Claim 20 has been so amended.

Claim 20 has been further amended to address a typographical error. More particularly, Claim 20 has amended to recite that the films of the invention exhibit a modulus of elasticity in the transverse direction of greater than or equal to 4200 N/mm^2 . Support for this amendment can be found in the Application-as-filed, for example on Page 3, lines 8 through 9.

Applicants respectfully submit that Claim 20 is now in condition for allowance.

Claim 1 has been amended to emphasize that the films of the invention advantageously include pigment consisting entirely of barium sulfate. Support for this amendment can be found in the Application-as-filed, for example on Page 4, lines 26 through 27.

Claims 12 through 15, directed to the methods of the invention and previously withdrawn from prosecution, have been canceled without prejudice or disclaimer to the filing of continuing applications thereon.

Reexamination and reconsideration of this application, withdrawal of all rejections, and formal notification of the allowability of the pending claims are earnestly solicited in light of the following remarks.

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Submission of Revised Terminal Disclaimer

Claims 1 through 9 remain rejected under the judicially created doctrine of obviousness-type double patenting in light of United States Patent No. 6,521,351 to Murschall et al. Applicants submit herewith a revised copy of the terminal disclaimer submitted with Applicants Amendment of April 19, 2004. Applicants' Representative notes that the title listed for the above-referenced application is in error on the terminal disclaimer submitted with Applicants Amendment of April 19, 2004. Applicants' Representative assumes that this error has precluded the entry of the Terminal disclaimer, whose receipt is acknowledged within the outstanding Office Action, and regrets any inconvenience this oversight may have caused. Accordingly, Applicants submit herewith a corrected terminal disclaimer disclaiming the terminal part of any patents granted on the above-identified application extending beyond the expiration date of the full statutory term which may ultimately result from United States Patent No. 6,521,351.

Rejection Under 35 USC § 103

Claims 1 through 5, 9 through 11 and 16 through 19 stand rejected over United States Patent No. 5,660,931 to Kim ("US 931") in view of United States Patent No. 6,641,924 to Peiffer et al. ("US 924"). Claim 6 stands rejected as unpatentable over the foregoing references and further in view of United States Patent No. 4,384,040 to von Meer. ("US 040"). Out of an abundance of caution, Applicants respectfully reiterate that all references to Kim are assumed to be associated with US 931, as the noted United States Patent No. 4,933,043 is to Instance.

It may be useful to consider the invention as recited in the claims before addressing the merits of the rejection. The claims recite opaque, white films with a thickness of from 10 to 500 μm . The recited films are formed from a crystallizable thermoplastic which consists entirely of polyester, along with a pigment consisting

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entirely of barium sulfate and at least one optical brightener. The film further includes a functional coating having a thickness of from 5 to 10 nm.

Surprising, the luminous transmittance of the recited film compositions is reduced when the longitudinal stretch ratio is increased, as reflected in the claims. More specifically, the compositions of the invention allow films with an even lower transparency to be produced by merely increasing the longitudinal stretching ratio during the manufacturing process. An increase of 7 % in the longitudinal stretching ratio can yield a reduction of from 15 to 20 % in transparency, for example, as reflected in Claim 19. The Examiner's attention is kindly directed to the Application-as-filed on Page 11, line 20 through Page 12, line 1; Page 7, lines 5 through 9; Page 15, lines 10 through 18 and Page 17, Table, Example 3 versus Example 2. Such a result is altogether unexpected, as conventional wisdom would indicate that thicker colored films would have a lower transparency.

Applicants have thus determined an advantageous combination of a particular pigment, i.e. barium sulfate, optical brightener, functional coatings and process conditions that provide a highly beneficial balance of physical properties within the resulting polyester films. More specifically, the opaque, white films of the invention provide good mechanical properties and good optical properties, as well as a range of functionalities, such as sealability, printability, and the like.

The cited references do not teach or suggest the claimed invention.

US 931 is directed to low-weighted polymeric films having paper-like characteristics. (Col. 1, lines 57 – 58). US 931 includes inorganic compounds within its films to impart "whiteness and hiding power to the film." (Col. 2, lines 25 – 26). The impetus of US 931 is the incorporation of polyolefin into paper substitutes to provide a suitably low density to the resulting film. (Col. 1, lines 60 – 67; Col. 2, lines 22 – 24 and Col. 3, lines 9 - 13). US 931 emphasizes the importance of polyolefin to its invention by

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repeatedly noting its presence numerous times within the specification. (Col. 1, lines 61 – 67; Col. 2, lines 10 – 12; Col. 2, lines 22 – 26; Col. 2, lines 31 – 34; Col. 2, lines 46 – 49; Col. 2, lines 62 – 65; Col. 3, lines 16 – 19; Col. 3, lines 38 – 31; Col. 4, lines 4 – 20; Col. 8, lines 65 – 66; Col. 11, lines 26 – 27; Col. 13, lines 45 – 46; Col. 17, lines 23 – 24; Col. 18, lines 58 – 59). The working examples of US 931 indicate the predominant use of a 3.5: 1 draw ratio. (Col. 9, lines 11 – 14; Col. 12, lines 11 – 12; Col. 16, lines 28 – 29; Col. 18, lines 61 – 62). A draw ratio of 2.5:1 is provided for a single set of examples, but no mention is made of the opacity of the resulting films. (Col. 14, lines 28 – 29).

Applicants respectfully reiterate that US 931, considered either alone or in combination with the art of record, does not teach or suggest the claimed invention, reciting films formed from a crystallizable thermoplastic consisting entirely of polyester. In fact, US 931 strongly teaches away from such films by requiring the presence of polyolefin in its films.

Applicants also respectfully reiterate that US 931 does not teach or suggest the recited reduction in luminous transmittance with increasing longitudinal stretch ratios. In fact, US 931 teaches away from the use of process conditions to impact optical properties, by noting that its inorganic compound is fully responsible for the whiteness and hiding power of the resulting films. And US 931 most certainly does not teach or suggest the particular decreased luminous transmittance of Claim 19.

Accordingly, Applicants respectfully submit that the claimed invention is patentable in light of US 931 considered either alone or in combination with the art of record.

US 924 does not cure the deficiencies in US 931.

US 924 is directed to high gloss films rendered white by the inclusion of cyclic olefin copolymer ("COC"), which may be included in amounts of up to 60 % by weight.

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(Col. 2, lines 62 - 63 and Col. 3, lines 5 - 9). US 924 expressly notes that the "whiteness and the opacity of the film can be precisely controlled and matched" by tailoring the amount and type of COC added to the film. (Col. 3, lines 45 - 48). In fact, other whiteners and opacifiers are not required in US 924. (Col. 3, lines 48 - 50). US 924 then goes on to disclose that the incorporation of the COC led to a lower surface roughness and higher surface gloss than provided in films of the prior art. (Col. 3, lines 50 - 53). US 924 discloses that simultaneous orientation procedures yield films having insufficient whiteness and opacity, its only reference to the impact of processing conditions on resulting film properties. (Col. 9, lines 37 - 41).

Applicants respectfully submit that US 924, considered either alone or in combination with the art of record, does not teach or suggest the claimed invention, reciting films incorporating pigment consisting entirely of barium sulfate. In fact, US 924 strongly teaches away from the recited films by requiring COC as the whitening agent within its films.

Nor does US 924 teach or suggest compositions providing the recited reduction in luminous transmittance with increasing longitudinal stretch ratios. In fact, US 924 teaches away from longitudinal stretch ratios as a means by which to impact optical properties. US 924 instead notes a difference in optical properties resulting from simultaneous versus sequential orientation. US 924 thus most certainly does not teach or suggest the particular decreased luminous transmittance of Claim 19.

Accordingly, Applicants respectfully submit that the claimed invention is patentable in light of US 924, considered either alone or in combination with the art of record.

There was no motivation to have combined US 931 and US 924. Applicants respectfully reiterate that merely because the references can be combined is not enough, there must still be a suggestion. MPEP 2143.01 (section citing Mills). The particular

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problems addressed by US 931 and US 924 are altogether different. US 931 is directed to low-weighted paper substitutes incorporating polyolefin to decrease the resulting film density. US 924 is directed to white films incorporating COC to provide high gloss surfaces.

However, even if US 931 and US 924 were combined (which Applicants submit should not be done), the claimed invention would not result. Considered in its entirety, US 931 expressly requires the presence of polyolefin to lower the density of the resulting films. Considered in its entirety, US 924 expressly requires COC as a whitening agent to provide glossy film surfaces. Consequently, neither of US 931 or US 924, considered either alone or in combination, teaches or suggests the recited films formed from crystallizable thermoplastic consisting entirely of polyester that further incorporate pigment consisting entirely of barium sulfate. In fact, the claimed compositions would change the very principle of operation of both of the cited references. MPEP 2143.02.

Furthermore, neither US 931 or US 924 recognizes longitudinal stretch ratio as a result effective variable in relation to the luminous transmittance of the resulting film. MPEP 2144.05 II. B. Stated differently, although optical properties are generally optimizable, it was heretofore unknown that the longitudinal stretch ratio would be inversely proportional to opacity. Thus the claimed films are not the result of routine experimentation, as urged within the outstanding Office Action. Applicants respectfully submit that "obvious to try" is not the standard for patentability. As noted above, it is altogether surprising that the luminous transmittance of a film would decrease with increasing longitudinal stretch ratio. Accordingly, neither US 931 or US 924 teaches or suggests the recited films in which the luminous transmittance of the film is reduced when the longitudinal stretch ratio is increased for a film of the same thickness.

Applicants thus respectfully submit that Claims 1 through 5, 9 through 11 and 16 through 19 are patentable in light of US 931 and US 924, considered either alone or in combination.

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Applicants respectfully submit that Claim 6 is likewise patentable in light of the art of record.

US 040 is directed to paper substrates coated with a highly pigmented, waterproof coating. The waterproofed paper substrates are subsequently coated with a photographic emulsion. (Col. 2, lines 24 – 27). The waterproof coating is formed from unsaturated polymerizable resins, such as vinyl monomers. (Col. 2, lines 38 – 41). Blue dye may be included within the waterproof coating, in an unspecified amount. (Col. 4, lines 19 – 21).

Applicants respectfully reiterate that US 040, directed to paper substrates having a dyed coating formed from vinyl resins, does not indicate the conventionality of blue dye within the recited polyester films.

Applicants respectfully reiterate that there is no motivation to combine these references. US 931 is directed to films used in packaging. US 924 is likewise primarily directed to packaging films. US 040 is directed to photographic paper. These are altogether different fields of endeavor, to say the least.

However, even if the cited references were combined (which Applicants submit should not be done), the claimed invention would not result. US 931 expressly requires the presence of polyolefin. US 924 expressly requires the presence of COC. US 040 merely discloses dyed coatings on a paper substrate. Consequently, none of the art of record, considered either alone or in combination, teaches or suggests the recited films formed from crystallizable thermoplastic consisting entirely of polyester and including a pigment consisting entirely of barium sulfate, much less such polyester films incorporating a polyester-soluble blue dye, and most certainly not such films incorporating blue dye in an amount ranging from 10 to 10,000 ppm.

Accordingly, Applicants respectfully submit that Claim 6 is patentable in light of US 931, US 924 and US 040, considered either alone or in combination.

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Based on the foregoing, Applicants respectfully submit that Claims 1 through 11 and 16 through 20 are patentable in light of the art of record, considered either alone or in combination.

Statement in Conformance with 37 CFR 3.73(b)

As noted above, a Power of Attorney, appointing Cathy R. Moore as a Practitioner of Record for Mitsubishi Polyester Film, GmbH, is attached. The above-referenced application has been assigned in its entirety to Mitsubishi Polyester Film, GmbH at Reel/Frame 011540/0065. Copies of the assignment will be forwarded upon request. Accordingly, Cathy R. Moore is authorized to act on behalf of Mitsubishi Polyester Film, GmbH in the above-referenced application.

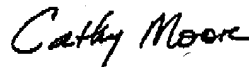
CONCLUSION

It is respectfully submitted that Applicants have made a significant and important contribution to the art, which is neither disclosed nor suggested in the art. It is believed that all of pending Claims 1 through 11 and Claims 16 through 20 are now in condition for immediate allowance. It is requested that the Examiner telephone the undersigned if any questions remain to expedite examination of this application.

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It is not believed that fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional fees are necessary to allow consideration of this paper, the fees are hereby authorized to be charged to Deposit Account No. 50-2193.

Respectfully submitted,




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CERTIFICATE OF TRANSMISSION

I hereby certify that this correspondence is being transmitted to facsimile number (703) 872-9306 at the United States Patent and Trademark Office on October 1, 2004.


Claire Wygand